

International application No.
PCT/JP02/06162

A. CLASS	IFICATION OF SUBJECT MATTER Cl ⁷ F02M51/00, F02M59/34		
According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS	SEARCHED		
Minimum documentation searched (classification system followed by classification symbols)			
Int.Cl ⁷ F02M51/00, F02M59/34			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Jitsuyo Shinan Koho 1922–1996 Toroku Jitsuyo Shinan Koho 1994–2002			
Kokai Jitsuyo Shinan Koho 1971-2002 Jitsuyo Shinan Toroku Koho 1996-2002			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)			
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C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where app		Relevant to claim No.
Х	JP 8-303325 A (Aisan Industry 19 November, 1996 (19.11.96),	y Co., Ltd.),	1-2,4-8, 10,18
Y	Full text; all drawings (Family: none)		3,9,11-17, 19-23
Y	JP 10-288105 A (Toyota Motor 27 October, 1998 (27.10.98), Full text; all drawings (Family: none)	Corp.),	3,9,11-17, 19
Y	JP 63-117147 A (Toyota Motor 21 May, 1988 (21.05.88), Full text; all drawings (Family: none)	Corp.),	20-23
L Ever	ner documents are listed in the continuation of Box C.	See patent family annex.	<u> </u>
"T" later document published after the international filing date or			
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance		priority date and not in conflict with t	he application but cited to derlying the invention
"E" earlier document but published on or after the international filing		"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive	
"L" date "C" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other "Y		step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be	
special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other		considered to involve an inventive ste	p when the document is
means "P" document published prior to the international filing date but later "&"		combination being obvious to a perso document member of the same patent	n skilled in the art
Date of the	he priority date claimed actual completion of the international search September, 2002 (20.09.02)	Date of mailing of the international sear 08 October, 2002 (6	
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